circuitry which [means for] input[ting]s signal-polarity inverting signals together with the picture data, and [for] which invert[ing]s the polarity of the analog signal from [output of] the D/A converter; and

a buffer disposed between said D/A converter and said selection circuit, which stores the analog signal of inverted polarity from the D/A converter.

REMARKS

Claim 1 has been amended in order to recite the present invention with the specificity required by statute.[1] No new matter has been added.

Claims 1-5, 7-12, 15, 16, 18-22, 24-29, 32, 33, 34 and 38-47 stand rejected under 35 U.S.C. §103 as obvious over Lewis, of record, in view of Yamaguchi, newly cited. Additionally, claims 13, 14, 17, 30, 31, 34, 36, 37 and 48 stand rejected as obvious over this art in view of Misawa, also of record.

Generally, in support of the rejection, the Examiner states "Lewis discloses a matrix substrate having switching elements connected to picture element electrodes (550),

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[1] Claim 1 has also been amended so as not to utilize "means-plus-function" language under 35 U.S.C. §112, sixth paragraph.

intersecting scanning (G) and signal (D) lines, a digital horizontal scanning circuit (505), a latch circuit (515), a D/A converter (255), signal transfer switches (520) and transfer switch selection."

The Examiner acknowledges Lewis does not disclose "means for inputting signal-polarity inverting signals together with the picture data, and for inverting the polarity of the analog output of the D/A convertor." However, this deficiency is said to be addressed by Yamaguchi, citing to Yamaguchi Figure 2 and column 2, lines 1-29. (In fact, Lewis also fails to teach disposing the buffer between the D/A converter and the selection circuit and starting the analog data of inverted polarity from D/A converter, which is nowhere discussed on the Office Action.)

This rejection is respectfully traversed. In particular, the Examiner's reliance upon Yamaguchi[2] is believed to be founded in a misunderstanding of that reference. Accordingly, as discussed below, there is no basis in fact for the Examiner's statements.

Specifically, a close reading of Yamaguchi reveals that the reference does not teach "means for inverting the polarity of the analog output of the D/A converter", contrary to the

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[2] Irrespective of the deficiency of Lewis noted above.

Examiner's assertion. That is to say, in lines 1-29 at column 2 of Yamaguchi (as relied on by the Examiner), no digital signal is used as the first and second data signals. Rather, the disclosure therein is simply that the first and second data signals are inverted per each frame so as to be analog data signals of respectively opposite polarities.

Thus, the analog data signals of Yamaguchi are quite different from the analog data signal obtained by converting a digital data signal into an analog data signal through a D/A converter, and inverting polarity of the analog signal outputted from the D/A converter according to the pending claims.

Accordingly, the present invention is not *prima facie* obvious from the Examiner's combination of cited art.

In addition, the present invention permits a load upon an image signal line can be made smaller (as well as a load per one D/A converter) so as to increase a period of writing in a liquid crystal pixel. As a result, high luminance and high contrast display can be provided. Moreover, according to the present invention, the number of parts of an external drive circuit can be reduced.

These advantages too are unobvious from Yamaguchi and, in fact, cannot be obtained from the Examiner's combination of

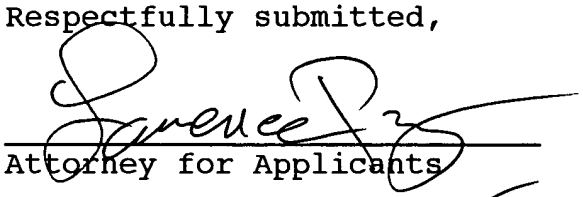
prior art.

In view of the above amendments and remarks, Applicants submit that all of the Examiner's concerns are now overcome and the claims are now in allowable condition. Accordingly, reconsideration and allowance of this application is earnestly solicited.

Claims 1-5, 7-22 and 24-48 remain presented for continued prosecution.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should be directed to our below listed address.

Respectfully submitted,



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